



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/350,060	07/08/1999	DAVID MONROE CHAPMAN	W9443-02	7518

7590

07/09/2003

CHARLES A CROSS
W R GRACE & CO - CONN
PATENT DEPARTMENT
7500 GRACE DRIVE
COLUMBIA, MD 210444098

EXAMINER

AHMED, SHEEBA

ART UNIT

PAPER NUMBER

1773

20

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/350,060

Applicant(s)

CHAPMAN, DAVID MONROE

Examiner

Sheeba Ahmed

Art Unit

1773

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 06 June 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
 2. ☐ The proposed amendment(s) will not be entered because:
 (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ they raise the issue of new matter (see Note below);
 (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
 4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See attached sheet.
 6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
 7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: None.Claim(s) objected to: None.Claim(s) rejected: 1-30.

Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
 9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
 10. ☒ Other: See attached sheet.

Art Unit: 1773

1. The Request for Reconsideration filed on June 6, 2003 (Paper No. 19) has been entered in the above-identified application however does not place the application in condition for allowance.

Applicants traverse the rejection of claims 14-22 under 35 U.S.C. 102(b) as being anticipated by Abe et al. (EP 0586846B1) and submit that Abe et al. does not disclose porous inorganic oxides having a pre volume in the range of 0.6 to 3.0 cc/g and that those of ordinary skill in the art would recognize that colloidal silica is generally not porous. However, as pointed out in the Office Actions mailed on June 24, 2002 (Paper No. 13) and January 10, 2003 (Paper No. 16), the Examiner has taken the position that the silica disclosed by Abe et al. must have the claimed pore volume given that the chemical composition and the method of making the silica disclosed by Abe et al. and that of the claimed invention are identical as evidenced by the fact that the Applicants specifically state on Page 14 of the Specification that the cationic materials of the instant invention are prepared by the techniques given in US 3,007,878 and Abe specifically states that their cation modified silica is prepared by the method described in US 3,007,878. In other words, the silica disclosed by Abe et al. and that of the claimed invention **must be** identical, i.e., must be porous and have the same porosity, given that both are prepared by the same process, i.e., the process described in US 3,007,878. Applicants further argue that Abe does not disclose a non-ionic latex. However, the Examiner would again like to point out that Abe simply discloses a polyvinyl acetate latex. It is clear from the chemical structure of polyvinyl acetate that the structure does not carry a charge and is hence non-ionic and it is the Examiner's

Art Unit: 1773

position that polyvinyl acetate can be rendered cationic or anionic by the appropriate modification but a non-modified polyvinyl acetate is simply non-ionic.

Applicants further traverse the rejections under 35 U.S.C. 103(a) as being unpatentable over Stokes et al. (US 5,660,928) in view of Alexander et al. (US 3,007,878) (i.e., claims 1-8 and 10-13) and submit that the Stokes does not expressly describe or suggest non-ionic latexes and that in view of the evidence presented by the Applicants (i.e., the Roche literature) one of ordinary skill in the art would not be motivated to specifically select a nonionic latex. It is the Applicants position that one can not infer that the polyvinyl acetate disclosed by Stokes is non-ionic. In response, the Examiner would like to point out that Stokes simply discloses a polyvinyl acetate latex. It is clear from the chemical structure of polyvinyl acetate that the structure does not carry a charge and is hence non-ionic. The Applicants have submitted a document from Rohm&Haas that shows that polyvinyl acetate may be anionic. However, the Examiner takes the position that polyvinyl acetate can be rendered cationic or anionic by the appropriate modification but **a non-modified polyvinyl acetate is simply non-ionic**. Applicants further submit that the combination of Stokes and Alexander would arrive at a coating formulation containing non-porous particles and not the cationic porous inorganic oxide particles of the claimed invention. However, the Examiner takes the position that the silica disclosed by Alexander must have the claimed pore volume, and hence must be porous, given that the Applicants specifically state on Page 14 of the Specification that the cationic materials of the instant invention are prepared by the techniques given in US 3,007878 to Alexander.

Art Unit: 1773

With regards to the rejection of claims 1-3, 5-8, 10, 13, and 23-30 under 35 U.S.C. 103(a) as being unpatentable over Abe et al. (EP 0586846B1), the Applicants submit that the Examiner is in error to state that the pore volume of Abe et al's silica is the same as that of the instant invention and that one would not be motivated to determine optimum solids content, volume fraction and weight ratios of nonionic latex. However, as pointed out above, the silica disclosed by Abe et al. and that of the claimed invention **must be** identical, i.e., must be porous and have the same porosity, given that both are prepared by the same process, i.e., the process described in US 3,007,878. Furthermore, with regards to the argument that the Examiner has not provided any motivation to optimize the solids content, the volume fraction and the weight ratio of the nonionic latex to polyvinyl alcohol, the Examiner would like to point out that a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. In this case, it would have been obvious to one having ordinary skill in the art to have determined the optimum solids content, the optimum volume fraction and the optimum weight ratio of the nonionic latex to polyvinyl alcohol given that the drying property of the ink, the film forming properties of the ink-receiving layer and the gloss and sharpness of the image on the ink receiving layer can be controlled by optimizing the solids content and the weight ratio of one polymer to the other.

Hence, the above rejections are maintained.

Art Unit: 1773

Conclusion

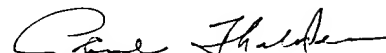
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheeba Ahmed whose telephone number is (703)305-0594. The examiner can normally be reached on Mondays and Thursdays from 8am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703)308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-5408 for regular communications and (703)305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5665.



Sheeba Ahmed
July 3, 2003



Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700